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NOTE ON DIOGENES LAERTIUS ix. 108

The received texts accessible to me read: τέλος δὲ οἱ σκεπτικοὶ φασὶ τὴν ἐποχὴν ἢ σκιᾷ τρόπον ἐπακολουθεῖ ἡ ἀταραξία . . . οὔτε γὰρ τὰδ' ἐλούμεθα ἢ ταῦτα φευξόμεθα ὅσα περὶ ἡμᾶς ἐστι· τὰ δ' ὅσα περὶ ἡμᾶς οὐκ ἔστιν ἀλλὰ κατ' ἀνάγκην, οὐ δυνάμεθα φυγεῖν.

For περὶ ἡμᾶς we should, I think, substitute in this passage παρ' ἡμᾶς, which is the regular phrase employed in ethical discussions of the things in our power and in debates on the freedom of the will. Cf. παρ' αὐτάς, Alexander Aphrodisiensis, Suppl. Berlin, II, ii, 61. Still more common of course is ἐφ' ἡμῖν; but περὶ ἡμᾶς I think will hardly admit the meaning. It would rather contrast our immediate concerns or intimate qualities with τὰ ἐκτός; cf. Sextus Empiricus, Πρὸς Λογικοὺς; A 176, καὶ τῶν περὶ αὐτὸν λαμβάνει φαντασίαν καὶ τῶν ἐκτός.

For the contrast with necessity cf. Aetius Plac. 1. 27. 3; Πλάτων ἐγκρίνει μὲν τὴν εἰμαρμένην . . . συνεισάγει δὲ καὶ τὴν παρ' ἡμᾶς αἰτίαν; Sextus Empiricus *Pyrrh. Hypotyp.* 29, ἀλλ' ὀχλείσθαι φαμεν ὑπο τῶν καταναγκασμένων, in contrast to τοῖς δοξαστοῖς, which he takes for granted are in our power; Plutarch *De comm. not.* 1071a, τὸ πάντα τὰ παρ' ἑαυτὸν ποιεῖν; *De Stoic. repugn.* 1041d, καὶ πᾶς ἁμαρτάνων παρ' ἑαυτὸν ἁμαρτάνει; Stobaeus *Eclog.* ii. 7. p. 95. 24 W, νομίζειν τὸν ἁμαρτηκότα μὴ παρ' αὐτὸν ἁμαρτηκέαι. In Plutarch *De Stoic. repugn.* 1044 A we should perhaps emend ὅσα δὲ πρὸς ἑαυτοὺς το παρ' ἑαυτοὺς, for τὰ παρ' αὐτόν is used in the same argument a few lines below.

Examples of this use of παρὰ might be multiplied indefinitely. The construction is inadequately treated in Liddell and Scott and in Kühner-Gerth, II, 1, 513. Its force is sometimes missed as, e.g., in Julian *Or.* 224B; cf. *Class. Phil. supra*, X, 231.

PAUL SHOREY

NOTE ON PLATO *Rep.* 587 C-E

When Plato calculates that a King is 729 times happier than a Tyrant, he "is only playing with numbers and must not be taken too seriously" (J. and C.). "The actual calculations are inspired by a desire to reach the total 729" (Adam). Yet, serious or not, Plato must have intended to give his calculations a semblance of plausibility, sufficient at least to carry his hearers with him. He has left us moderns a little puzzled. Two questions thrust themselves upon us: Why does Plato cube the 9? What is the meaning of ἐπίπεδον and the relation of the statement in which it occurs to what precedes and follows?

I need not point out the assumptions that Plato makes in order to reach the conclusion that the King and the Tyrant are distant from True Pleasure in the proportion of 1 to 9. We are content that the assumption be made, provided that we see how the thing is done. Plato is playing with words

that have a technical mathematical meaning. Even in untechnical language μέσον is the "middle space" or the "middle point." Plato takes it to mean "half-way between," when we expect it to mean simply "in between." ἀπόστασις was the mathematical term for the interval in a proportion. It is so used by Plato in *Tim.* 43 D, probably so in *Rep.* 546 B, and in 587 E the phrase τὸν δὲ τύραννον ἀναρότερον τῇ αὐτῇ ταύτῃ ἀποστάσει is translated "the Tyrant lives more painfully than the King in the same proportion" (D. and V.). It is probable, then, that ἀπὸ τοῦ ὀλιγαρχικοῦ τρίτος ὁ τύραννος ἀφειστήκει in mathematical language meant "the ratio of Oligarch to Tyrant is one-third," i.e., with reference to distance from True Pleasure.

1. WHY DOES PLATO CUBE THE 9?

On this Adam has the following note:

What motive induced Plato to cube the distance? Was it something purely fanciful, e.g., "in order to gauge the *depth* of the tyrant's misery" (J. and C.), or because the king and the tyrant are themselves solid creatures? I think not. He probably intended to suggest that "the degradation proceeds by increasingly wide intervals" (Bosanquet), but the actual calculations are inspired by a desire to reach the total 729.

This summary reveals one fundamental error in previous interpretations. The *distance* of the Tyrant from True Pleasure is not cubed. The final expression for the distance is *τριπλασίον ἄρα τριπλάσιον ἀριθμῷ ἀληθοῦς ἡδονῆς ἀφείστηκεν τύραννος*. The next sentence refers to the εἶδωλον, not to the distance, and the following ἀπόστασιν ὅσην ἀφειστηκώς refers to a ratio not intended to be thought of as linear distance.

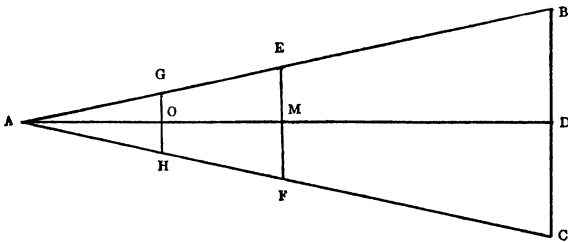
The fact that the King and the Tyrant are "solid creatures" is important, but it is not in itself sufficient to explain the cubing. The additional light that is needed is to be found in the proper interpretation of the word εἶδωλον, "image" or "shadow." Let us represent the misery of the King by a stick one foot long. The King is not at the point of True Pleasure (cf. *πλείστον δὴ ἀληθοῦς ἡδονῆς καὶ οἰκειάς ὁ τύραννος ἀφειστήξει, ὁ δὲ [βασιλεὺς] ὀλίγιστον*); we can measure his misery. Now suppose this stick to cast a shadow nine feet long upon a wall parallel to the plane of the stick. This nine-foot shadow will represent the misery of the Tyrant in *linear measure* (κατὰ τὸν τοῦ μήκους ἀριθμόν). But there is no reason why we should not take, as the unit of measurement representing King-misery, a board one foot square. This, held parallel to the wall at the same distance, will cast a shadow that is $9 \times 9 = 81$ square feet. Then Tyrant-misery:King-misery = $81:1$ in *square measure*, or reckoning κατὰ δύναμιν. Finally, since the King is a solid creature, let us represent his misery by a regular cube, $1 \times 1 \times 1$ ft., which, if properly held, will cast upon the wall a shadow that suggests a cube $9 \times 9 \times 9 = 729$ cubic feet. Thus, reckoning κατὰ τρίτην αὔξην, King-misery:Tyrant-misery = $1:729$. If this explanation is correct, we need not, with Adam, ask, "What motive induced Plato to cube the distance?" It is, indeed, impossible to conceive an adequate motive, so long as we have in mind the idea of linear distance.

2. WHAT IS THE MEANING OF ἐπίπεδον?

ἐπίπεδον commonly means a "plane surface" (cf. *Rep.* 528 D), but we are told that the Greeks gave to ἀριθμοί "numbers," the name ἐπίπεδοι when they were the product of two numbers: 6, being 2×3 , is ἐπίπεδος. Plato has ἐπίπεδος ἀριθμός in *Theaet.* 148 A. Based upon this distinction there are two interpretations of this part of our passage. Schneider finds the ratio 1:9 in the sentence *τριπλασίον ἄρα, ἣν δ' ἐγώ, τριπλάσιον ἀριθμῷ ἀληθοῦς ἡδονῆς ἀφέστηκεν τύραννος*. In the next sentence, ἐπίπεδον ἄρ', ἔφην, ὡς ἔοικεν, τὸ εἶδωλον κατὰ τὸν τοῦ μήκους ἀριθμὸν ἡδονῆς τυραννικῆς ἂν εἴη, giving to ἐπίπεδον its ordinary meaning of a "plane surface" or "square," he gets the squaring of the 9, and the ratio 1:81. Then, taking δύναμιν as *power* and τρίτην αὔξην as explanatory of δύναμιν, he reaches the cubing of the 9 and the ratio 1:729. This interpretation has the advantage of making the three sentences describe in succession the three ratios, and, particularly, of giving a comprehensible idea to ἐπίπεδον. Moreover, the explanation of the whole sentence ἐπίπεδον . . . εἴη may be defended with some success by comparison with *Theaet.* 148 A. On the other hand, Adam and others claim that κατὰ τὸν τοῦ μήκους ἀριθμὸν and κατὰ δύναμιν καὶ τρίτην αὔξην give us the natural succession linear measure, square measure, and cubic measure. The claim has great weight, but in this case the sentence ἐπίπεδον . . . εἴη seems to carry us no farther than the preceding. In fact, it only puzzles us, for what sense is there in "the shadow of tyrannical pleasure in linear measure would be a square [number?]" Adam remarks:

The whole sentence is, I believe, only a way of saying that, if the tyrant is 3×3 degrees distant from true pleasure, his εἶδωλον of pleasure may be represented by 9. The use of the mathematical term ἐπίπεδον has a playful effect, both in itself and also because it sounds wilful and eccentric to express a number of one "increase" (τὸν τοῦ μήκους ἀριθμὸν) in terms of two.

I believe that the explanation of the passage can be reached by emphasizing the distinction of the *distance* and the *shadow*, as under 1 above. But, to make myself clear, I shall have to make use of a geometrical figure.



ABC is an isosceles triangle, with *AD* perpendicular to *BC*. *EF* and *GH* are parallel to *BC*. Then, if *AM* is $\frac{1}{3}$ *AD*, it follows that *EF* is $\frac{1}{3}$ *BC*; and if *AO* is $\frac{1}{3}$ *AM*, *GH* is $\frac{1}{3}$ *EF* and $\frac{1}{9}$ *BC*. That is, the vertical lines are proportional to their distances from *A*. Or, if *A* is the position of True Pleasure,

AO , AM , AD the respective distances from True Pleasure of King, Oligarch, Tyrant, and GH , EF , BC the respective shadows of King, Oligarch, Tyrant, the length of the shadows varies in proportion to the distances. Consequently, after Plato has drawn the conclusion ($\alpha\beta\alpha$) that "the Tyrant is, numerically, thrice three times removed from True Pleasure," he goes on to draw the conclusion ($\alpha\beta\alpha$) that the length of the shadow representing tyrannical pleasure is proportionally great, just as, above, the statement ἀπὸ τοῦ ὀλιγαρχικοῦ τρίτος πού ὁ τύραννος ἀφειστήκει is followed by the statement οὐκοῦν καὶ ἡδονῆς τρίτῃ εἰδώλῳ πρὸς ἀλήθειαν ἀπ' ἐκείνου ξυνοικοῖ ἂν. Now the sentence *τριπλασίον ἄρα τριπλάσιον ἀριθμῷ ἀληθοῦς ἡδονῆς ἀφέστηκεν τύραννος*, as a conclusion from what precedes, really implies the following: "If we call the King's distance from True Pleasure 1 and the Oligarch's, therefore, 3, the Tyrant's is 3×3 , or the square of the Oligarch's distance." Similarly the sentence *ἐπίπεδον ἄρ', ἔφην, ὡς ἔοικεν, τὸ εἶδωλον κατὰ τὸν τοῦ μήκους ἀριθμὸν ἡδονῆς τυραννικῆς ἂν εἴη*, given its full expression, means: "Consequently, if, in regard to length, we call the King's shadow 1, and the Oligarch's, therefore, 3, the Tyrant's shadow would be the square of the Oligarch's." With a square unit for the King's shadow the Oligarch's becomes $3 \times 3 = 9$, and the Tyrant's the square of that, $9 \times 9 = 81$. With a cubic unit for the King's shadow, the Oligarch's becomes $3 \times 3 \times 3 = 27$, and the Tyrant's again the square of that, $27 \times 27 = 729$ ($= 9 \times 9 \times 9$).

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